

COVID-19 & the Club

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DOCUMENT PURPOSE

Get to the real information and data regarding COVID-19, what it is, how it is transmitted, and how to deal with it. This is some of the background information for my COVID-19 classes and the basis of the plan I am formulating for opening the labs at the university.

I continually try to obtain sources that are peer reviewed, cross-checked, and supported in the scientific and medical communities. There are many articles and sources contained in this document and I urge you to read through them all, watch the videos, dig into the references. Most links have links within the articles, and those links have links; lots of deep diving can be done. Some of the articles bring up concepts and theories you can investigate on your own if you want to learn more. Some info will conflict, that's where you need to dig deeper.

There is a lot of information here, this is not a 10-minute read, I have been researching this for months, it will take you lots of time to take it all in. In this document I am primarily focusing on the club and our risks since most of us are in the high-risk category.

The Club's Achilles Heel

The main method of disease transmission is through the air, breathing too much virus loaded air from too many people in an enclosed space for too long, like the club. The club is an enclosed space, zero fresh air, so having 2 or more people there simultaneously for hours while running or working, even though we would be more than 6 feet apart, would create the opportunity to transmit the disease. We have no way of flushing the air. I consider the club in its current state a high-risk environment.

Background Information

One of the more interesting collections of information I have come across is from Dr. Erin Bromage, Assoc. Professor of Biology at the University of Massachusetts Dartmouth, where he teaches and researches infectious diseases and host immune responses of animals. He has been culling through the scientific and medical data and presenting it in a manner for all to understand. Here is the link to his online portal/blog/CV:

<https://www.erinbromage.com/>

Dr. Bromage has written many blog posts on COVID-19, but this by far is his most popular and is extremely informative:

The Risks - Know Them - Avoid Them

<https://www.erinbromage.com/post/the-risks-know-them-avoid-them>

He was recently interviewed on a NY Times Event hosted by Tara Parker-Pope, founding editor of Well (<https://www.nytimes.com/section/well>), this a good overview of the practical side of the COVID reality:

How to Lower the Risk of Contracting Covid-19

<https://www.youtube.com/watch?v=2p1iSWJlmfk>

It is highly recommended you go through all his posts, most are short, but he has a lot of them. They are well worth the read, and well worth your and your family's health.

Here is another analysis of the spread of the disease:

An analysis of three Covid-19 outbreaks: how they happened and how they can be avoided

https://english.elpais.com/spanish_news/2020-06-17/an-analysis-of-three-covid-19-outbreaks-how-they-happened-and-how-they-can-be-avoided.html

More on the spread of the disease:

Second wave of mass COVID-19 cases can likely be prevented, a Penn researcher found

<https://www.thedp.com/article/2020/06/covid-reopening-jeffrey-morris-research-penn>

The key is in the last paragraph.

What's the Risk of Catching Coronavirus From a Surface?

<https://www.nytimes.com/2020/05/28/well/live/whats-the-risk-of-catching-coronavirus-from-a-surface.html>

Can I Get Coronavirus From Riding an Elevator?

<https://www.nytimes.com/2020/05/13/well/live/can-i-get-coronavirus-from-riding-an-elevator.html>

Surfaces Are 'Not the Main Way' Coronavirus Spreads, C.D.C. Says

<https://www.nytimes.com/2020/05/22/health/cdc-coronavirus-touching-surfaces.html?searchResultPosition=3>

Another source of good data is from Dr. Linsey C. Marr, Professor of Environmental Engineering at Virginia Tech, she has been studying airborne virus movement (fluid mechanics) and is considered the leading expert on the subject. Here is her profile page:

<https://www.cee.vt.edu/profile/?pid=lmarr>

She also has a lot of great stuff on her Twitter feed (I'm not a huge fan of social media but she is propagating some good stuff):

<https://twitter.com/linseymarr>

More info from Dr. Marr:

The Scientist, the Air and the Virus

<https://www.nytimes.com/2020/06/12/well/live/Coronavirus-aerosols-linsey-marr.html?searchResultPosition=4>

Will a Vaccine Save us?

The Race to Develop a Covid Vaccine

<https://www.nytimes.com/2020/06/22/well/live/covid-vaccine.html>